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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,800	08/03/2001	Vincent Roy Page	839-1029	8215

30024 7590 08/16/2004
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ARLINGTON, VA 22201

EXAMINER

LANGEL, WAYNE A

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 08/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

ART UNIT	PAPER NUMBER
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DATE MAILED:

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☐ This application has been examined ☒ Responsive to communication filed on 7-16-04 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), _____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 6-11 are pending in the application.

Of the above, claims _____ are withdrawn from consideration.

2. ☐ Claims _____ have been cancelled.

3. ☐ Claims _____ are allowed.

4. ☒ Claims 6-11 are rejected.

5. ☐ Claims _____ are objected to.

6. ☐ Claims _____ are subject to restriction or election requirement.

7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).

12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received. ☐ been filed in parent application, serial no. _____; filed on _____.

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

EXAMINER'S ACTION

disclose or suggest specifically the second step in claim 8 requiring the addition of sufficient potassium hydroxide in particulate form to generate a potassium nitrate fertilizer via the second stage reactions recited therein, is not convincing, since Cooper et al. disclose the production of the nitrate salt in the Abstract and again at column 8, lines 14-17. The reactions to form such potassium nitrate in the process of Cooper et al. would inherently be according to the reactions recited in step "b" of applicant's claim 8. Applicant's argument, that it does not appear that Cooper et al. even suggest adding hydrogen peroxide in amounts necessary to generate the first set of reactions in subparagraph (a) of independent claim 8, noting the specifically disclosed reactions in column 5 of Cooper et al., is not convincing, since Cooper et al. disclose in the sentence bridging columns 4 and 5 that the general reactions leading to NO_x oxidation are "believed" to include the recited reactions. Cooper et al. do not teach that the reactions involved would necessarily be those recited at column 5, lines 5-10. On the contrary, the reactions of Cooper et al. would inherently be the same as those recited in subparagraph (a) of applicant's claim 8, since the reaction conditions disclosed by Cooper et al. are identical to those recited in claim 8.

Claims 6, 7 and 9 are rejected under 35 U.S.C. 103(a) as

Art Unit 1754

being unpatentable over Cooper et al. as applied to claim 8 above, and further in view of Jones '298, for the reasons given in the last Office action.

Claims 8, 10 and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over DE 4216772 in view of Cooper et al., for the reasons given in the last Office action. Applicant's argument, that nowhere does DE 4216772 disclose the formation of a potassium nitrate fertilizer as a byproduct of the reactions utilized to reduce NO_x emissions, is not convincing, since Cooper et al. is relied upon for such teaching. Applicant has not explained why it would not be obvious from Cooper et al. to substitute potassium hydroxide powder for the calcium hydroxide powder so as to form potassium nitrate.

Claims 6, 7 and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over DE 4216772 in view of Jones '298, further in view of Cooper et al., for the reasons given in the last Office action.

Claims 6-11 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 6 and 8, the recitation of "to the stream to the potassium nitrate fertilizer" is indefinite. The word --generate-- should be inserted before the

Serial No. 09/920,800

-5-

Art Unit 1754

phrase "the potassium nitrate fertilizer" to avoid this rejection.

Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne A. Langel whose telephone number is (571) 272-1353. The examiner can normally be reached on Monday through Friday from 8 A.M. to 3:30 P.M.

Serial No. 09/920,800

-6-

Art Unit 1754

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on (571) 272-1358. The fax phone number for this Group is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or public PAIR. Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WAL:cdc

August 10, 2004

Wayne A. Langel
WAYNE A. LANGEL
PRIMARY EXAMINER